

Abstract

A method is presented for measuring the height of an air-bearing separating a flying component from a rotating surface using physical deformation of a small amount of material deposited on the surface. One embodiment of the invention is a method of measuring the fly-height of a slider using physical deformation of material deposited on the disk. Small amounts of the deformable material such as a viscoelastic lubricant are placed on a limited area of the disk so that the slider can otherwise fly normally. The slider's fly-height is established over the unaltered portion of the disk, then the slider impacts the deformable material. This process results in the deformable material being flattened or removed above the fly-height of the slider. The height of the remaining material is then measurable as the fly-height.